

LISTING OF THE CLAIMS

A complete listing of the claims is provided below. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Cancelled)

2. (Previously Cancelled)

3. (Previously Cancelled)

4. (Previously Cancelled)

5. (Previously Cancelled)

6. (Previously Cancelled)

7. (Previously Cancelled)

8. (Previously Cancelled)

9. (Previously Cancelled)

10. (Currently Amended) A backflow preventor apparatus for connection to parallel, oppositely-flowing inlet and outlet conduits, comprising:

a first housing having a first valve having a valve body and connected to the inlet conduit via a first flange, said first valve mounted in said first housing so that it is positioned generally parallel to the inlet conduit, said first valve movable between an opened position and a closed position, wherein said first valve comprises a first disc-shaped clapper pivotally connected to the valve body via a first pivot arm; and

a second housing connected to said first housing and the fluid outlet via a second flange, having a second valve having a valve body positioned at an angle approximately 90 degrees to the inlet, said second valve movable between an opened position and a closed position, wherein said second valve comprises a second disc-shaped clapper pivotally connected to the valve body via a second pivot arm;

wherein the flow of fluid has an average streamline path between the inlet conduit and the outlet conduit, wherein the sum of changes in flow direction of said average streamline path is approximately 180 degrees.

11. (Previously Presented) The apparatus according to claim 10, wherein said first valve and said second valve are positioned at 90 degree angle to one another.

12. (Previously Presented) The apparatus according to claim 10, wherein said flanges include holes for accommodating bolts for coupling to the inlet and outlet conduits.

13. (Currently Amended) A backflow preventor apparatus for connection to parallel, oppositely-flowing inlet and outlet conduits, comprising:

a first housing having a first valve having a valve body and connected to the inlet conduit via a first flange, said first valve mounted in said first housing so that it is positioned generally parallel to the inlet conduit, said first valve movable between an opened position and a closed position, wherein said first valve comprises a first disc-shaped clapper pivotally connected to the valve body via a first pivot arm; and

a second housing connected to said first housing and the fluid outlet via a second flange, having a second valve having a valve body positioned at an angle approximately 90 degrees to the inlet, said second valve movable between an opened position and a closed position, wherein said second valve comprises a second disc-shaped clapper pivotally connected to the valve body via a second pivot arm; and

a conduit, extending between and coupled to said first housing and said second housing, wherein the flow of fluid has an average streamline path between the inlet conduit and the outlet conduit, wherein the sum of changes in flow direction of said average streamline path is approximately 180 degrees.

14. (Previously Presented) The apparatus according to claim 13, wherein at least a portion of said conduit is downward sloping.

15. (Previously Presented) The apparatus according to claim 13, said first valve and said second valve are positioned at 90 degree angle to one another.

16. (Currently Amended) A backflow preventor apparatus for connection to parallel, oppositely-flowing inlet and outlet conduits, comprising:

a first housing having a first valve having a valve body and connected to the inlet conduit, said first valve mounted in said first housing so that it is positioned generally parallel to the inlet conduit, said first valve movable between an opened position and a closed position, wherein said first valve comprises a first disc-shaped clapper pivotally connected to the valve body via a first pivot arm;

a second housing connected to the fluid outlet having a second valve having a valve body positioned at an angle approximately 90 degrees to the inlet, said second valve movable between an opened position and a closed position, wherein said second valve comprises a second disc-shaped clapper pivotally connected to the valve body via a second pivot arm; and

a third valve in fluid communication with said first housing that controls the flow of fluid into said first housing,

wherein the flow of fluid has an average streamline path between the inlet conduit and the outlet conduit, wherein the sum of changes in flow direction of said average streamline path is approximately 180 degrees.

17. (Previously Presented) The apparatus according to claim 16, wherein said first valve and said second valve are positioned at 90 degree angle to one another.

18. (Previously Presented) An apparatus, as claimed in claim 16, wherein said first valve is positioned at a higher elevation than said third valve.

19. (Previously Presented) An apparatus, as claimed in claim 16, further comprising a first handle for operating said third valve, said first handle extending horizontally in a direction perpendicular to a line connecting the inlet and outlet conduits.

20. (Previously Presented) An apparatus, as claimed in claim 16, further comprising a fourth valve in fluid communication with said second housing that controls the flow of fluid out of said second housing.

21. (Previously Presented) An apparatus, as claimed in claim 20, wherein said second valve is positioned at a higher elevation than said fourth valve.

22. (Previously Presented) An apparatus, as claimed in claim 20, further comprising a second handle for operating said fourth valve, said second handle extending horizontally in a direction perpendicular to a line connecting said inlet and outlet conduits.

23. (Currently Amended) A backflow preventor apparatus for connection to parallel, oppositely-flowing inlet and outlet conduits each having longitudinal axes, comprising:

a housing configured to accommodate first and second valves, and to receive fluid flow from said inlet conduit;

a first valve pivotaly mounted in said housing having a seatable valve disc having an edge, moveable between a closed configuration preventing flow and an open configuration permitting flow through a first inlet port in a first direction, said first valve mounted to extend generally parallel to the longitudinal axis of the inlet conduit; and

a second valve pivotally mounted in said housing having a seatable valve disc having an edge, movable between a closed configuration preventing flow and an open configuration permitting flow through a second inlet port in a second direction, said second valve mounted at angle approximately 90 degrees to the longitudinal axis of the outlet conduit, said axis of mounting of said second valve being substantially perpendicular to said axis of mounting of said first valve;

said fluid flow having an average streamline path between said inlet and said outlet conduit, wherein the sum of changes in flow direction of said average streamline path is not substantially greater than about 180 degrees,

further comprising a first flange for coupling to said inlet conduit and a second flange for coupling to said outlet conduit.